identical colour test charts which display the additive and subtractive primary colors red, green, blue, cyan, magenta and yellow. The resulting single anaglyphic colour chart reveals balanced contrasts from the whole color spectrum inside each anaglyphic colour channel. An example of such an Anaglyphic Contrast Balance achieved via an ACB Stereo Color Contrast Filter is as follows.

[0118] ACB Stereo Color Contrast Filter Values.

1 For the image viewed through red gel.
Red + cyan 62%, Yellow + cyan 40%, Green -cyan 70%, Cyan - cyan 78%,
Blue - cyan 58%, Magenta + cyan 55%, Black - black 10%.

For the image viewed through green-blue gel.
Red - magenta 66%, Yellow no treatment, Green + magenta 41%, Cyan + magenta 48%,
Blue + yellow 52%, Magenta - black 40% Black - black 10%

[0119] The basic Anaglyphic Contrast Balance addresses the primary colors Red, Green and Blue.
2 For the image viewed through red gel.
Red+cyan Green-cyan Blue-cyan

For the image viewed through green-blue gel.
Red-magenta Green+magenta Blue+yellow

[0120] The filter values given above are in absolute percentages so that a percentage of a colour hue can be added to where there was no prior presence of it.

[0121] Note that the ACB filter value for black in both the left and right images is reduced. This assists in reducing the contrast of the black color records in the stereo pair to enable uptake of the color wash described later herein. By comparison, should the ACB filter value for black not be reduced, a brighter anaglyph results. Should the ACB filter value for black be increased, the resulting anaglyph is brighter yet.

[0122] Such control of brightness is achieved when variation to the ACB Stereo Color Contrast Filter's values for black are followed by the processes of Luminosity Compression and Color Wash. The effect is more subtle where color wash via RGB levels is used. These embodiments of the present invention are described later herin.

or motion.

[0021] Item 7. Isolation of unaided two-dimensional display from a modulating anaglyphic record.

[0022] Item 8. The selection between two autostereoscopic color programs from one image signal via anaglyphic/lenticular method.

[0023] Item 1. ANAGLYPHIC CONTRAST BALANCE PRODUCTION METHOD OVERVIEW.

[0024] The Anaglyphic Contrast Balance (ACB) encompasses stages of treatments, namely, Stereo Color Contrast Filter, Luminosity Compression, Colour Wash, and Contrast expansion. These stages are fully described later herein. The following however is an overview of the ACB process involving steps of,

[0025] 1. Isolating, aligning and or synchronizing stereoscopic pair, if this has not been automatically achieved in the process of their capture.

[0026] 2. Using a computer filter to selectively adjust the color records of stereo pairs so as to effect an anaglyphically viewed contrast balance of the stereo pair when processed.

[0027] 3. Using a computer filter to compress the luminosity of the stereo pair.

[0028] 4. Using a computer filter to color wash the images as spectrally opposite anaglyphic color channels. Or as an alternative to luminosity compression and colour wash, using a computer filter to selectively remove the red color record from one image of the stereo pair and to selectively remove the green and blue color records from the other image in the stereo pair to color saturate the images as approximately opposite spectral hues.

[0029] 5. Using a computer program to superimpose, blend and fuse the stereo pair so that each of the images are equally represented in the resulting single image composite.

[0030] 6. Using a computer program to expand the RGB output levels of the composite and thus of the anaglyphic color channels to reveal a bright three dimensional anaglyphic image with balanced and dynamic contrasts that is perceived in colour when viewed through red/green-blue viewing gels.

[0123] A computer programs software values for the above color filter values may be pre-set to render all adjustments with a single sweep. Or the color records may be treated individually. For example, the color filter values for the black color records may be adjusted to the nth degree.

[0124] Alternatively, selective color adjustments of the video pair may be achieved with a video path through regular existing analogue colour selective video filters.

[0125] Variations

[0126] For high quality monochromatic anaglyph production, both images of the stereo pair should at this point be de-saturated of colour or rendered as black and white images instead of being selectively colour adjusted as above. Alternative filter values of the ACB Stereo Color Contrast filter are required for alternative methods of Color Wash or anaglyphic colour channel saturation described later herein.

[0127] ACB Luminosity Compression refer to FIG. 3.

[0128] Luminosity compression is a solution for ghosting or the perception of double images typically evident with the bright and white areas of the stereoscopic anaglyphic image. White present in varying degrees throughout corresponding areas of the stereo pairs fails to adequately take up a saturation of any red, green or blue rendered to it and so tends to fail allocation to an anaglyphic color channel to enable an exclusive view to the appropriate eye. FIG. 3.16 is a histogram showing the combined RGB colour records of an image treated with the ACB Stereo Color Contrast filter prior to the treatment of the Luminosity Compression filter.

[0129] FIG. 3.17 is a histogram showing the combined RGB color records of the same image after the treatment of Luminosity Compression filter in accordance with one preferred embodiment of the present invention. Luminosity compression of the stereo pair causes their spectrums from extreme black to white and all contrasts in between (and along with their color hues) to be compressed resulting in reduced output levels. This causes bright colors and white to gather a substance of gray that will take up any red, green or blue rendered to it from the color wash or anaglyphic colour channel saturation that follows (described later herein) to enable image allocation within an anaglyphic colour channel.